

REMARKS

Reconsideration and withdrawal of the rejections of record is respectfully requested in view of the remarks contained herein.

Claims 1-7, 9-17, 19-28, 30-38, 38-40, 40-49, 51-59 and 61-65 remain pending in this application.

Item 6D. The Examiner states that “[c]laims 1-4, 9-16, 24, 30-37, 45, 51-58 are rejected under 35 U.S.C. § 102(b) as being anticipated by Henco et al. (U.S. Patent No. 5,057,426) (October 15, 1991).

It is respectfully pointed out to the Examiner that Henco does not teach the elements of the claims of the invention. The instant invention teaches a sequential process in which the biological material is first suspended in a high salt, hypertonic solution. As stated in the specification (See page 12 of the specification), a high salt, hypertonic solution is one in which the concentration of salt is greater than 1.0 M. Following this suspension in the high salt solution, lysis reagent is added to the biological material to cause lysis. This sequential process allows for high yields of DNA without having to use toxic reagents such as urea and guanidine salts.

In contrast, contrary to the assertions of the Examiner, Henco does not teach the above elements. In example 2 of Henco as cited by the Examiner (See Col. 12, lines 20-25), a high salt, hypertonic reagent to keep the biological material in suspension as taught by the instant invention is not employed. Example 2 employs a low salt solution of sodium chloride (0.3 M to 0.7 M) that allows for a preferential binding of the DNA released from the pre-lysed cell/phage mixture. Furthermore, the example cited by the Examiner in Col. 10, lines 30-40, does not teach the elements of the instant invention as the salt solutions (both low salt and high salt) are added after the material is lysed. Thus, not any single example taught by Henco and recited by the Examiner teach each of the sequential elements of the instant invention.

35 U.S.C. § 102

Item 8A. The Examiner states that “[c]laims 1-3, 6-7, 9-10, 13-16, 19-21, 23-25, 27-28, 30-31, 34-37, 40-42, 44-46, 48-49, 51-52, 55-58, 61-63, 65 are rejected under 35 U.S.C. § 102(b) as being anticipated by Miller et al. (Nucleic Acids Res., vol. 16, No. 3, 1988).

It is respectfully pointed out to the Examiner that Miller teaches a process in which the biological material is first lysed in the presence of lysis buffer and SDS, followed by the addition of a high salt, hypertonic reagent (6 M sodium chloride). In contrast, the instant invention teaches a process in which the aforementioned steps are reversed and performed sequentially.

Item 8B. The Examiner states that “[c]laims 1-3, 5-6, 13-17, 25-27, 34-38, 40-42, 44-46, 48-49, 51-52, 55-58, 61-63, 65 are rejected under 35 U.S.C. § 102(b) as being anticipated by Tomita et al.

It is respectfully pointed out to the Examiner that Tomita teaches a process in which the biological material is first lysed in the presence of salt at a concentration of less than 1.0 M. As stated in the specification (See page 12 of the specification), a high salt, hypertonic solution is one in which the concentration of salt is greater than 1.0 M. Thus, Tomita does not teach all the elements of the claims of the instant invention.

35 U.S.C. § 103

Item 9. The Examiner states that “[c]laims 22, 43, and 64 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Miller et al in view of Gray et al.

It is respectfully pointed out to the Examiner that Miller teaches a process in which the biological material is first lysed in the presence of lysis buffer and SDS, followed by the addition of a high salt, hypertonic reagent (6 M sodium chloride). In contrast, the instant invention teaches a process in which the aforementioned steps are reversed and performed sequentially. As pointed out in the office action dated January 15, 2004, Gray also teaches the isolation of the biological


material prior to the addition of a high salt reagent. Thus, the combined references of Miller and Gray do not recite the teachings of the instant invention.

Based on the remarks above, applicant believes all pending claims are in condition for allowance.

If the Examiner believes that a conference would be of value in expediting the prosecution of this application, the Examiner is hereby invited to telephone undersigned counsel to arrange for such a conference.

Respectfully submitted,

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